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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/599,526

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Takeyoshi Yamada

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EXAMINER

FERGUSON, LAWRENCE D

ART UNIT

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1794

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/599,526	Applicant(s) YAMADA ET AL.	
	Examiner LAWRENCE D. FERGUSON	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-37 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 9-37 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/29/06</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Information Disclosure Statement

1. The references disclosed within the information disclosure statement (IDS) submitted on September 29, 2006, has been considered and initialed by the Examiner.

Claim Rejections – 35 USC 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 9, 12-23, 25, 27, 29, 31, 33, 35 and 37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 9, the phrase, “heat shrinking ratio upon immersion in hot water at 80°C for 10 seconds of 20% or more in at least one of the directions” is indefinite. It is unclear what direction Applicant is referring to, because no directions have been defined in the claims.

In claim 12, the phrase, “heat shrinking ratio upon immersion in hot water at 100°C for 10 seconds of 60% or more in at least one of the directions” is indefinite. It is

Art Unit: 1794

unclear what direction Applicant is referring to, because no directions have been defined in the claims.

Claim Rejections – 35 USC § 102(b)

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 9-16, 19-25 and 28-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Satani et al (EP 1270203).

Satani discloses a heat shrinkable polyolefin film comprising surface layers (I and III) composed of a resin material containing a cyclic olefin resin as a main component and an intermediate layer composed of a resin material containing a polyethylene resin as a main component (page 2, lines 41-48). Satani further teaches the cyclic olefin material of the surface layers can be mixed with polyethylene (page 4, lines 7-10) where 80% by weight of the surface layers can be cyclic olefin copolymer resin and 20% by weight of the surface layers can be polyethylene (page 6, lines 41-46) which meets the mass ratio limitation of surface layer (I). Satani discloses the polyethylene resin can be linear low density polyethylene (page 3, lines 22-26) where Applicant's instant specification discloses linear low density polyethylene resins has a crystal melting peak temperature (T_m) that is no greater than 125°C, as measured with a differential

Art Unit: 1794

scanning calorimeter (DSC) in paragraphs [0052 through 0055]. Because Satani discloses a heat shrinkable polyolefin series laminated film comprising similar layers having similar materials and similar function, it is expected for the film to have a heat shrinking ratio upon immersion in hot water at 80°C for 10 seconds of 20% or more in at least one of the directions, as in claims 9-11. In claims 9-10, Applicant claims the phrase, “as measured with a differential scanning calorimeter (DSC).” Regardless of the method used to measure a characteristic, the characteristic measured is not altered.

Concerning claim 12, because Satani discloses a heat shrinkable polyolefin series laminated film comprising similar layers having similar materials and similar function, it is expected for the film to have a heat shrinking ratio upon immersion in hot water at 100°C for 10 seconds of 60% or more in at least one of the directions, and a maximum shrinking stress in the main shrinking direction of the film upon immersion silicon oil at 80 °C for 10 seconds of 10 MPa or less. In claim 12, Applicant claims the phrase, “as measured with a differential scanning calorimeter (DSC).” Regardless of the method used to measure a characteristic, the characteristic is not altered.

Concerning claims 13-14, the intermediate layer is 60 to 90% of the total thickness of the film (page 2, lines 47-50).

Concerning claim 15, because Satani discloses a heat shrinkable polyolefin series laminated film comprising similar layers having similar materials and similar function, it is expected for the film to have a modulus of elasticity n tensile of 1200 MPa or more in the direction orthogonal to the main shrinking direction of the film. In claim 15, the phrase, “as measured according to JIS K7127” introduces process limitations to

Art Unit: 1794

the product claims. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966.

Concerning claims 16 and 24-25, the reference discloses another olefin resin can be mixed in the resin material of the intermediate layer in an amount of 0 to 15% by weight (page 3, lines 31-37).

Concerning claims 19-21 and 28-33, the heat shrinkable film has a specific gravity of less than 1 (page 2, lines 41-43).

Concerning claims 22-23 and 34-37, the heat shrinkable film is made into a label (printer layer) which can be attached to a bottle (container) (abstract and page 2, lines 5-6, 41-43) where the film, which is made into a label, has a specific gravity of less than 1 (page 2, lines 41-43).

Claim Rejections – 35 USC § 103(a)

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1794

7. Claims 17-18 and 26-27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Satani et al (EP 1270203) in view of Ueyama et al (U.S. 6,699,549).

Satani is relied on claim 9 as above. Satani does not disclose one of the layers further comprising liquid paraffin. Ueyama teaches a heat shrinkable multilayer film suitable for use as a heat shrinkable material (column 1, lines 7-8 and column 4 lines 6-7) having an inner layer that includes linear low density polyethylene (column 5, lines 51-53). Ueyama further teaches it is conventional to add an additive into any of the layers, including the linear low density polyethylene intermediate layer, such as a lubricant, which includes liquid paraffin (column 6, line 62 through column 7, line 2). Satani and Ueyama are combinable as they are both directed to heat shrinkable multilayer materials. Therefore, it would have been obvious to one of ordinary skill in the art to include liquid paraffin in the layers of Satani to achieve the predictable result of preventing the heat shrinkable films of Satani from sticking to one another, when not in use and because Ueyama teaches it is conventional to add lubricants, such as liquid paraffin to heat shrinkable film layers.

Concerning claims 18 and 26-27, Satani discloses the laminate is composed of three or more layers comprising two surface layers and an intermediate layer (page 3, lines 10-13). Because the reference discloses more than the three layers, it is reasonable to expect multiple layers of the disclosed surface and intermediate layers, where it would have been obvious to one of ordinary skill in the art to rearrange the layers as claimed, since it has been held that rearranging layers of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Arthurs et al (U.S. 7,179,521) teaches a multilayer polyolefin shrink film (column 1, lines 16-20) comprising one or more inner layers comprising cyclic olefin copolymer and linear low density polyethylene and one or more outer layers of linear low density polyethylene (column 3, lines 7-24). Because the outer layers mainly comprise polyethylene and a cyclic olefin amount of 10 to 30% (column 3, lines 22-24) the reference teaches away from having outer layers with cyclic olefin as the main component. Additionally, Arthurs et al (U.S. 7,244,507) teaches a multilayer shrink film (column 4, lines 4-5) comprising first and second outer polyethylenic layers and one or more inner polyethylenic layers with a cyclic olefin copolymer inner layer (column 3, lines 60-63 and column 4, lines 9-16). Because the outer layers mainly comprising polyethylene and 4-6% of cyclic olefin (column 4, lines 34-40), the reference Teaches away from having outer layers with cyclic olefin as the main component.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is 571-272-1522. The examiner can normally be reached on Monday through Friday 9:00 AM – 5:30PM.

Art Unit: 1794

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil, can be reached on 571-272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Lawrence Ferguson/
Patent Examiner, Art Unit 1794

/Jennifer McNeil/
Supervisory Patent Examiner, Art Unit 1794